

What Is Claimed Is:

1. A method for doctoring a coating excess applied by a coater to a moving surface with a doctor roll, comprising the steps of supporting a doctor roll so
5 that it can rotate, mounting the doctor roll so that it moves toward or away from the moving surface, moving the doctor roll in a path as it moves toward or away from the moving surface, and supporting the doctor roll so that its movement in the direction of the moving surfaces is limited, loading the doctor roll against the moving surface for establishing the force of the doctor roll toward the moving surface, doctoring the
10 coating on the moving surface with the doctor roll, whereby the coating on the moving surface is consistently doctored by said doctor roll.
2. The method of Claim 1, wherein said step of moving said doctor roll comprises moving the doctor roll where it is closest said moving surface in a direction opposite that of said moving surface.
- 15 3. The method of Claim 2, comprising the step of limiting the movement of said doctor roll toward the moving surface.
4. The method of Claim 1, comprising the step of limiting the movement of said doctor roll toward the moving surface.
5. The method of Claim 1, comprising the step of rotatably supporting the
20 doctor roll in a doctor roll support and limiting the movement of the doctor roll support.
6. The method of Claim 5, comprising the step of mounting the upstream side relative to the moving surface movement of said doctor roll support for limited movement.
- 25 7. The method of Claim 6, wherein the mounting step comprising generally pivotally mounting the doctor roll support.
8. The method of Claim 1, wherein the supporting step comprises generally pivotally supporting the doctor roll.
9. The method of Claim 5, comprising retaining the downstream side of
30 the doctor roll support with a retaining member.

10. The method of Claim 9, comprising generally pivotally mounting the support member to slide on said retaining member.

11. The method of Claim 2, comprising the steps of limiting the movement of said doctor roll toward the moving surface by rotatably supporting the doctor roll in a doctor roll support and limiting the movement of the doctor roll support, mounting
5 the upstream side relative to the moving surface movement of said doctor roll support for limited movement by pivotally mounting the doctor roll support, and retaining the downstream side of the doctor roll support with a retaining member, and pivoting or rolling said doctor roll support to slide on said retaining member.

12. A method for doctoring a coating excess applied by a coater to a moving surface with a doctor roll for coating one of a paper or board web, comprising the steps of supporting a doctor roll so that it can rotate to have a movement in a direction opposite that of the direction of said moving surface, retaining the doctor roll with a retaining member at the downstream side of said doctor roll, mounting the
15 doctor roll so that it moves toward or away from the moving surface, moving the doctor roll in a path as it moves toward or away from the moving surface, and pivotally supporting the doctor roll so that its movement in the direction of the moving surfaces is limited, loading the doctor roll against the moving surface for establishing the force of the doctor roll toward the moving surface, doctoring the coating on the moving surface with the doctor roll, whereby the coating on the moving surface is
20 consistently doctored by said doctor roll.

13. A method for doctoring a coating excess applied by a coater to a moving roll surface of a roll which transfers coating to a paper/board web with a doctor roll, comprising the steps of supporting a doctor roll so that it can rotate, mounting the doctor roll so that it moves toward or away from the moving roll surface,
25 and supporting the doctor roll so that its movement in the direction of the moving roll surface is limited, loading the doctor roll against the moving roll surface for establishing the force of the doctor roll toward the moving roll surface, doctoring the coating on the moving roll surface with the doctor roll, whereby the coating on the moving roll surface is consistently doctored by said doctor roll.
30

14. A method for doctoring a coating excess applied by a coater to a moving paper/board web surface with a doctor roll, comprising the steps of supporting

a doctor roll so that it can rotate, mounting the doctor roll so that it moves toward or away from the moving paper/board web surface, moving the doctor roll in a path as it moves toward and away from the moving paper/board web surface, and supporting the doctor roll so that its movement in the direction of the moving paper/board web surfaces is limited, loading the doctor roll against the moving paper/board web surface for establishing the force of the doctor roll toward the moving paper/board web surface, doctoring the coating on the moving paper/board web surface with the doctor roll, whereby the coating on the moving paper/board web surface is consistently doctored by said doctor roll.

10 15. A doctoring apparatus for doctoring excess coating applied by a coater to a moving surface, comprising a rotatable doctor roll for doctoring excess coating from the moving surface, a movable mounting for said doctor roll to said coater, said doctor roll being movable toward or away from said moving surface, means for loading the doctor roll against the moving surface, support means for limiting the movement of said doctor roll, said support means being attached to said coater, said support means permitting movement of said doctor roll toward or away from said moving surface, said support means limiting movement of said doctor roll in a direction of movement of said moving surface, whereby coating applied to the moving surface may be consistently doctored by the doctor roll supported to move toward or away from the moving surface but limited in movement in a direction of the moving surface.

 16. A doctoring apparatus as in Claim 15, further comprising a doctor roll support for rotatably mounting said doctor roll, and said support means acting on said doctor roll support.

25 17. A doctoring apparatus as in Claim 16, wherein said support means comprising a retainer at the rear of said doctor roll support.

 18. A doctoring apparatus as in Claim 17, wherein said support means comprising a front mount secured to said coater and movably mounting said doctor roll support.

30 19. A doctoring apparatus as in Claim 18, wherein said doctor roll support is generally pivotally mounted to said front mount.

20. A doctoring apparatus as in Claim 17, wherein one of said retainer and doctor roll support is curved so that the retainer and doctor can relatively slide by each other.

21. A doctoring apparatus as in Claim 17, wherein said doctor roll and
5 retainer cooperate with one another to limit the travel of said doctor roll support toward the moving surface.

22. A doctoring apparatus as in Claim 17, wherein said doctor roll support has a groove therein, said retainer extending into said groove to limit doctor roll movement.

10 23. A doctoring apparatus as in Claim 22, wherein said groove and said retainer extending onto said groove are sized to prevent coating from flowing past said retainer.

24. A doctoring apparatus as in Claim 18, wherein said doctor roll support is generally pivotally mounted to said front mount, wherein one of said retainer and
15 doctor roll support is curved so that the retainer and doctor can relatively slide by each other, said doctor roll and retainer cooperating with one another to limit the travel of said doctor roll support toward the moving surface, said doctor roll support having a groove therein, said retainer having a hook portion extending into said groove to limit doctor roll movement, said hook portion and said groove being sized to act as a baffle
20 and prevent flow of coating past said hook portion, said doctor roll support or said doctor roll having cooling means for cooling the same.